## RICHARD W. HAMMING

# PERSONAL DATA

Citizenship:

U.S. Citizenship

Birth Date:

February 11, 1915

Marital Status:

Married

Residence:

1140 Sylvan Road, Monterey, CA 93940

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(408)649-4797

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(408)646-2655

#### **DEGREES RECEIVED**

1942 Ph.D., Mathematics, University of Illinois

1939 M.A., Mathematics, University of Nebraska

1937 B.S., Mathematics, University of Chicago

## RESUME OF CAREER

During 1945-6 was at Los Alamos doing atomic bomb calculations.

Bell Laboratories - July 1946 to July 1976. Worked mainly in math and computing as applied to military and telephone research.

Adjunct Professor of Statistics, Princeton for 3 years (2 days a week).

Joined the Naval Postgraduate School in 1976.

# **HONORS**

President, Association Computing Machinery

Turing Prize of ACM

Fellow IEEE

Piore Prize 1979

National Academy of Engineering 1980

Pender Prize 1981

IEEE R. W. Hamming medal named (gold medal, \$10,000 prize) 1986

IEEE R. W. Hamming medal awarded 1988

Vice President Math Section AAAS

Editor of numerous journals

## **PUBLICATIONS**

### Author of books:

Numerical Methods for Scientists and Engineers - first and second editions

Computers and Society

Introduction to Applied Numerical Analysis

Calculus and the Computer Revolution

Digital Filters (3rd Edition, January 1989)

Author of papers:

A Class of Integration Formulas
The Computer as an Experimental Tool
A Computer Scientist Looks at Statistics
Error Detecting and Error Correcting Codes

Impact of Computers

Educational Implications of the Computer Revolution

Intellectual Implications of the Computer Revolution

One Man's View of Computer Science

Introduction to "Fundamental Theory of Servomechanisms"

The Mechanization of Science

A Note on the Location of the Binary Point in a Computing Machine

Nuclear Magnetic Resonance in Crystals

Numerical Analysis vs. Mathematics

Pitfalls in Numerical Analysis - IEEE Talk, March 19, 1968

Numerical Evaluation of Electron Image Phase Contrast

Stable Predictor-Corrector Methods for Ordinary Differential Equations

The Impact of Computer Technology on Management Concepts, Planning and Decision Making

Checking Techniques for Digital Computers

Social Implications of the Computer Revolution

The Effects of Computers Upon Engineering Education

Mathematical Notes

Controlling the Digital Computer

**Computer Appreciation Courses** 

Convergent Monotone Series

Monotone Series

An Essay on Computer Science Training Programs

The Transcendental Character of COS X

On the Distribution of Numbers

Modern Control Theory

A Class of Integration Formulas

Computers and Society

An Elementary Discussion of the Transcendental Nature of the

**Elementary Transcendental Functions** 

Contributing to Modern Science and Engineering

Note on the Teaching of Trigonometry

The Effects of Computers Upon Engineering Education

The Electronic Digital Computer as an Intellectual Tool

General Purpose System

Standards for Computer Mathematics

Velocity Dependence of Contrast in Electron Images of Periodic Structures

Thinking Big Even with a Small Computer

Limitations of Computers

A Philosophy of Computer Science or My Prejudices and Confusions

How do You Know the Simulation is Relevant?

A History of Computing in the United States

Fifth Generation Computers and Beyond

The Future of Programmers

Invariance and Bertrands Paradox

The Role of the Digital Computer in Scientific Research, Past, Present, and

Future

Gaussian Quadrature as a Minimization Principle

**Error Correcting Codes** 

The Role of the Technical Societies in the Field of Computer Measurement Statistical Estimation of Error Propagation Through Multiplication and Division

The Role of the Technical Societies in the Field of Computer Measurement A Systems Approach to Software Testing

Noninterpolatory Quadrature Formulas

The Frequency Approach to Numerical Analysis

Compumetrics: The Way Ahead

Computers and Computing in the '70's

Commencement Talk to Engineering School, University of California, Irvine

The Distribution of Numbers - Applications

The Distribution of Numbers - Mathematical Theory

The Distribution of Numbers - Computer Theory

The Distribution of Numbers - Physical Theory

Some Thoughts on Simulation

**Band Limited Functions**